RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/539,630_

Source: _PCT_

Date Processed by STIC: _6/30/05_

ENTERED

PCT

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 2 <110> APPLICANT: Takeda Chemical Industries, Ltd.
 4 <120> TITLE OF INVENTION: Preventing and treating agent for cancer
 6 <130> FILE REFERENCE: 3130WOOP
C-->  8 <140> CURRENT APPLICATION NUMBER: US/10/539,630
C-->  8 <141> CURRENT FILING DATE: 2005-06-17
 8 <150> PRIOR APPLICATION NUMBER: JP2002-373144
 9 <151> PRIOR FILING DATE: 2002-12-24
11 <160> NUMBER OF SEQ ID NOS: 14
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 751
15 <212> TYPE: PRT
16 <213> ORGANISM: Human
18 <400> SEQUENCE: 1
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21 Lys Arg Val Lys Ser Glu Tyr Met Arg Leu Arg Gln Leu Lys Arg Phe
22              20                  25                  30
23 Arg Arg Ala Asp Glu Val Lys Ser Met Phe Ser Ser Asn Arg Gln Lys
24          35                  40                  45
25 Ile Leu Glu Arg Thr Glu Ile Leu Asn Gln Glu Trp Lys Gln Arg Arg
26      50                  55                  60
27 Ile Gln Pro Val His Ile Leu Thr Ser Val Ser Ser Leu Arg Gly Thr
28  65                  70                  75                  80
29 Arg Glu Cys Ser Val Thr Ser Asp Leu Asp Phe Pro Thr Gln Val Ile
30                  85                  90                  95
31 Pro Leu Lys Thr Leu Asn Ala Val Ala Ser Val Pro Ile Met Tyr Ser
32                 100                 105                 110
33 Trp Ser Pro Leu Gln Gln Asn Phe Met Val Glu Asp Glu Thr Val Leu
34             115                 120                 125
35 His Asn Ile Pro Tyr Met Gly Asp Glu Val Leu Asp Gln Asp Gly Thr
36         130                 135                 140
37 Phe Ile Glu Glu Leu Ile Lys Asn Tyr Asp Gly Lys Val His Gly Asp
38 145                 150                 155                 160
39 Arg Glu Cys Gly Phe Ile Asn Asp Glu Ile Phe Val Glu Leu Val Asn
40                 165                 170                 175
41 Ala Leu Gly Gln Tyr Asn Asp Asp Asp Asp Asp Asp Gly Asp Asp
42             180                 185                 190
43 Pro Glu Glu Arg Glu Glu Lys Gln Lys Asp Leu Glu Asp His Arg Asp
44             195                 200                 205
45 Asp Lys Glu Ser Arg Pro Pro Arg Lys Phe Pro Ser Asp Lys Ile Phe
46         210                 215                 220
47 Glu Ala Ile Ser Ser Met Phe Pro Asp Lys Gly Thr Ala Glu Glu Leu
48 225                 230                 235                 240
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49 Lys Glu Lys Tyr Lys Glu Leu Thr Glu Gln Gln Leu Pro Gly Ala Leu
50              245                 250                 255
51 Pro Pro Glu Cys Thr Pro Asn Ile Asp Gly Pro Asn Ala Lys Ser Val
52              260                 265                 270
53 Gln Arg Glu Gln Ser Leu His Ser Phe His Thr Leu Phe Cys Arg Arg
54              275                 280                 285
55 Cys Phe Lys Tyr Asp Cys Phe Leu His Arg Lys Cys Asn Tyr Ser Phe
56      290                 295                 300
57 His Ala Thr Pro Asn Thr Tyr Lys Arg Lys Asn Thr Glu Thr Ala Leu
58 305                 310                 315                 320
59 Asp Asn Lys Pro Cys Gly Pro Gln Cys Tyr Gln His Leu Glu Gly Ala
60              325                 330                 335
61 Lys Glu Phe Ala Ala Ala Leu Thr Ala Glu Arg Ile Lys Thr Pro Pro
62              340                 345                 350
63 Lys Arg Pro Gly Gly Arg Arg Arg Gly Arg Leu Pro Asn Asn Ser Ser
64              355                 360                 365
65 Arg Pro Ser Thr Pro Thr Ile Asn Val Leu Glu Ser Lys Asp Thr Asp
66    370                 375                 380
67 Ser Asp Arg Glu Ala Gly Thr Glu Thr Gly Gly Glu Asn Asn Asp Lys
68 385                 390                 395                 400
69 Glu Glu Glu Glu Lys Lys Asp Glu Thr Ser Ser Ser Ser Glu Ala Asn
70              405                 410                 415
71 Ser Arg Cys Gln Thr Pro Ile Lys Met Lys Pro Asn Ile Glu Pro Pro
72              420                 425                 430
73 Glu Asn Val Glu Trp Ser Gly Ala Glu Ala Ser Met Phe Arg Val Leu
74              435                 440                 445
75 Ile Gly Thr Tyr Tyr Asp Asn Phe Cys Ala Ile Ala Arg Leu Ile Gly
76      450                 455                 460
77 Thr Lys Thr Cys Arg Gln Val Tyr Glu Phe Arg Val Lys Glu Ser Ser
78 465                 470                 475                 480
79 Ile Ile Ala Pro Ala Pro Ala Glu Asp Val Asp Thr Pro Pro Arg Lys
80              485                 490                 495
81 Lys Lys Arg Lys His Arg Leu Trp Ala Ala His Cys Arg Lys Ile Gln
82              500                 505                 510
83 Leu Lys Lys Asp Gly Ser Ser Asn His Val Tyr Asn Tyr Gln Pro Cys
84              515                 520                 525
85 Asp His Pro Arg Gln Pro Cys Asp Ser Ser Cys Pro Cys Val Ile Ala
86      530                 535                 540
87 Gln Asn Phe Cys Glu Lys Phe Cys Gln Cys Ser Ser Glu Cys Gln Asn
88 545                 550                 555                 560
89 Arg Phe Pro Gly Cys Arg Cys Lys Ala Gln Cys Asn Thr Lys Gln Cys
90              565                 570                 575
91 Pro Cys Tyr Leu Ala Val Arg Glu Cys Asp Pro Asp Leu Cys Leu Thr
92      580                 585                 590
93 Cys Gly Ala Ala Asp His Trp Asp Ser Lys Asn Val Ser Cys Lys Asn
94      595                 600                 605
95 Cys Ser Ile Gln Arg Gly Ser Lys Lys His Leu Leu Leu Ala Pro Ser
96    610                 615                 620
97 Asp Val Ala Gly Trp Gly Ile Phe Ile Lys Asp Pro Val Gln Lys Asn
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RAW SEQUENCE LISTING   DATE: 06/30/2005
PATENT APPLICATION: US/10/539,630   TIME: 17:41:33

Input Set : A:\pto.kd.txt
Output Set: N:\CRF4\06302005\J539630.raw

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 99 Glu Phe Ile Ser Glu Tyr Cys Gly Glu Ile Ile Ser Gln Asp Glu Ala
100              645              650              655
101 Asp Arg Arg Gly Lys Val Tyr Asp Lys Tyr Met Cys Ser Phe Leu Phe
102              660              665              670
103 Asn Leu Asn Asn Asp Phe Val Val Asp Ala Thr Arg Lys Gly Asn Lys
104          675              680              685
105 Ile Arg Phe Ala Asn His Ser Val Asn Pro Asn Cys Tyr Ala Lys Val
106      690              695              700
107 Met Met Val Asn Gly Asp His Arg Ile Gly Ile Phe Ala Lys Arg Ala
108 705              710              715              720
109 Ile Gln Thr Gly Glu Glu Leu Phe Phe Asp Tyr Arg Tyr Ser Gln Ala
110              725              730              735
111 Asp Ala Leu Lys Tyr Val Gly Ile Glu Arg Glu Met Glu Ile Pro
112              740              745              750
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115 <211> LENGTH: 2253
116 <212> TYPE: DNA
117 <213> ORGANISM: Human
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121 tcagagtaca tgcgactgag acagctcaag aggttcagac gagctgatga agtaaagagt  120
122 atgtttagtt ccaatcgtca gaaaattttg gaaagaacgg aaatcttaaa ccaagaatgg  180
123 aaacagcgaa ggatacagcc tgtgcacatc ctgacttctg tgagctcatt gcgcgggact  240
124 agggagtgtt cggtgaccag tgacttggat tttccaacac aagtcatccc attaaagact  300
125 ctgaatgcag ttgcttcagt acccataatg tattcttggt ctcccctaca gcagaatttt  360
126 atggtggaag atgaaactgt tttacataac attccttata tgggagatga agttttagat  420
127 caggatggta ctttcattga agaactaata aaaaattatg atgggaaagt acacggggat  480
128 agagaatgtg ggtttataaa tgatgaaatt tttgtggagt tggtgaatgc ccttggtcaa  540
129 tataatgatg atgacgatga tgatgatgga gacgatcctg aagaaagaga agaaaagcag  600
130 aaagatctgg aggatcaccg agatgataaa gaaagccgcc cacctcggaa atttccttct  660
131 gataaaattt ttgaagccat ttcctcaatg tttccagata agggcacagc agaagaacta  720
132 aaggaaaaat ataaagaact caccgaacag cagctcccag gcgcacttcc tcctgaatgt  780
133 acccccaaca tagatggacc aaatgctaaa tctgttcaga gagagcaaag cttacactcc  840
134 tttcatacgc ttttctgtag gcgatgtttt aaatatgact gcttcctaca tcgtaagtgc  900
135 aattattctt ttcatgcaac acccaacact tataagcgga agaacacaga aacagctcta  960
136 gacaacaaac cttgtggacc acagtgttac cagcatttgg agggagcaaa ggagtttgct 1020
137 gctgctctca ccgctgagcg gataaagacc ccaccaaaac gtccaggagg ccgcagaaga 1080
138 ggacggcttc ccaataacag tagcaggccc agcacccca ccattaatgt gctggaatca 1140
139 aaggatacag acagtgatag ggaagcaggg actgaaacgg ggggagagaa caatgataaa 1200
140 gaagaagaag agaagaaaga tgaaacttcg agctcctctg aagcaaattc tcggtgtcaa 1260
141 acaccaataa agatgaagcc aaatattgaa cctcctgaga atgtggagtg gagtggtgct 1320
142 gaagcctcaa tgtttagagt cctcattggc acttactatg acaatttctg tgccattgct 1380
143 aggttaattg ggaccaaaac atgtagacag gtgtatgagt ttagagtcaa agaatctagc 1440
144 atcatagctc cagctcccgc tgaggatgtg gatactcctc caggaaaaaa gaagaggaaa 1500
145 caccggttgt gggctgcaca ctgcagaaag atacagctga aaaaggacgg ctcctctaac 1560
146 catgtttaca actatcaacc ctgtgatcat ccacggcagc cttgtgacag ttcgtgccct 1620
147 tgtgtgatag cacaaaattt ttgtgaaaag ttttgtcaat gtagttcaga gtgtcaaaac 1680
148 cgctttccgg gatgccgctg caaagcacag tgcaacacca gcagtgccc gtgctacctg 1740
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149 gctgtccgag agtgtgaccc tgacctctgt cttacttgtg gagccgctga ccattgggac  1800
150 agtaaaaatg tgtcctgcaa gaactgcagt attcagcggg gctccaaaaa gcatctattg  1860
151 ctggcaccat ctgacgtggc aggctggggg atttttatca aagatcctgt gcagaaaaat  1920
152 gaattcatct cagaatactg tggagagatt atttctcaag atgaagctga cagaagaggg  1980
153 aaagtgtatg ataaatacat gtgcagcttt ctgttcaact tgaacaatga ttttgtggtg  2040
154 gatgcaaccc gcaagggtaa caaaattcgt tttgcaaatc attcggtaaa tccaaactgc  2100
155 tatgcaaaag ttatgatggt taacggtgat cacaggatag gtattttttgc caagagagcc  2160
156 atccagactg gcgaagagct gtttttttgat tacagataca gccaggctga tgccctgaag  2220
157 tatgtcggca tcgaaagaga aatggaaatc cct                                 2253
159 <210> SEQ ID NO: 3
160 <211> LENGTH: 2695
161 <212> TYPE: DNA
162 <213> ORGANISM: Human
164 <400> SEQUENCE: 3
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166 acccggtggg actcagaagg cagtggagcc ccggcggcgg cggcggcggc gcgcggggggc   120
167 gacgcgcggg aacaacgcga gtcggcgcgc gggacgaaga ataatcatgg gccagactgg   180
168 gaagaaatct gagaagggac cagtttgttg gcggaagcgt gtaaaatcag agtacatgcg   240
169 actgagacag ctcaagaggt tcagacgagc tgatgaagta aagagtatgt ttagttccaa   300
170 tcgtcagaaa attttggaaa gaacggaaat cttaaaccaa gaatggaaac agcgaaggat   360
171 acagcctgtg cacatcctga cttctgtgag ctcattgcgc gggactaggg agtgttcggt   420
172 gaccagtgac ttggattttc caacacaagt catcccatta aagactctga atgcagttgc   480
173 ttcagtaccc ataatgtatt cttggtctcc cctacagcag aattttatgg tggaagatga   540
174 aactgtttta cataacattc cttatatggg agatgaagtt ttagatcagg atggtacttt   600
175 cattgaagaa ctaataaaaa attatgatgg gaaagtacac ggggatagag aatgtggggtt   660
176 tataaatgat gaaatttttg tggagttggt gaatgccctt ggtcaatata atgatgatga   720
177 cgatgatgat gatggagacg atcctgaaga aagagaagaa aagcagaaag atctggagga   780
178 tcaccgagat gataaagaaa gccgcccacc tcggaaattt ccttctgata aaatttttga   840
179 agccatttcc tcaatgtttc cagataaggg cacagcagaa gaactaaagg aaaaatataa   900
180 agaactcacc gaacagcagc tcccaggcgc acttcctcct gaatgtaccc ccaacataga   960
181 tggaccaaat gctaaatctg ttcagagaga gcaaagctta cactcctttc atacgctttt  1020
182 ctgtaggcga tgttttaaat atgactgctt cctacatcgt aagtgcaatt attcttttca  1080
183 tgcaacaccc aacacttata agcggaagaa cacagaaaca gctctagaca caaaccttg   1140
184 tggaccacag tgttaccagc atttggaggg agcaaaggag tttgctgctg ctctcaccgc  1200
185 tgagcggata aagacccccac caaaacgtcc aggaggccgc agaagaggac ggcttcccaa  1260
186 taacagtagc aggcccagca cccccaccat taatgtgctg gaatcaaagg atacagacag  1320
187 tgatagggaa gcagggactg aaacggggggg agagaacaat gataaagaag aagaagagaa  1380
188 gaaagatgaa acttcgagct cctctgaagc aaattctcgg tgtcaaacac caataaagat  1440
189 gaagccaaat attgaacctc ctgagaatgt ggagtggagt ggtgctgaag cctcaatgtt  1500
190 tagagtcctc attggcactt actatgacaa tttctgtgcc attgctaggt taattgggac  1560
191 caaaacatgt agacaggtgt atgagtttag agtcaaagaa tctagcatca tagctccagc  1620
192 tcccgctgag gatgtggata ctcctccaag gaaaagaag aggaaacacc ggttgtgggc  1680
193 tgcacactgc agaaagatac agctgaaaaa ggacggctcc tctaaccatg tttacaacta  1740
194 tcaaccctgt gatcatccac ggcagccttg tgacagttcg tgcccttgtg tgatagcaca  1800
195 aaatttttgt gaaaagtttt gtcaatgtag ttcagagtgt caaaaccgct ttccgggatg  1860
196 ccgctgcaaa gcacagtgca acaccaagca gtgcccgtgc tacctggctg tccgagagtg  1920
197 tgaccctgac ctctgtctta cttgtggagc cgctgaccat tgggacagta aaaatgtgtc  1980
198 ctgcaagaac tgcagtattc agcggggctc caaaaagcat ctattgctgg caccatctga  2040
199 cgtggcaggc tggggggattt ttatcaaaga tcctgtgcag aaaaatgaat tcatctcaga  2100
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RAW SEQUENCE LISTING   DATE: 06/30/2005
PATENT APPLICATION: US/10/539,630   TIME: 17:41:33

Input Set : A:\pto.kd.txt
Output Set: N:\CRF4\06302005\J539630.raw

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200 atactgtgga gagattattt ctcaagatga agctgacaga agagggaaag tgtatgataa  2160
201 atacatgtgc agctttctgt tcaacttgaa caatgatttt gtggtggatg caacccgcaa  2220
202 gggtaacaaa attcgttttg caaatcattc ggtaaatcca aactgctatg caaaagttat  2280
203 gatggttaac ggtgatcaca ggataggtat ttttgccaag agagccatcc agactggcga  2340
204 agagctgttt tttgattaca gatacagcca ggctgatgcc ctgaagtatg tcggcatcga  2400
205 aagagaaatg gaaatccctt gacatctgct acctcctccc ccctcctctg aaacagctgc  2460
206 cttagcttca ggaacctcga gtactgtggg caatttagaa aaagaacatg cagtttgaaa  2520
207 ttctgaattt gcaaagtact gtaagaataa tttatagtaa tgagtttaaa aatcaacttt  2580
208 ttattgcctt ctcaccagct gcaaagtgtt ttgtaccagt gaatttttgc aataatgcag  2640
209 tatggtacat ttttcaactt tgaataaaga atacttgaac ttgtcaaaaa aaaaa         2695
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212 <211> LENGTH: 19
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial Sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Primer
219 <400> SEQUENCE: 4
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223 <211> LENGTH: 21
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: Primer
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233 <210> SEQ ID NO: 6
234 <211> LENGTH: 18
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Primer
241 <400> SEQUENCE: 6
242 caagcagtgc ccgtgcta                                                 18
244 <210> SEQ ID NO: 7
245 <211> LENGTH: 21
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION: Primer
252 <400> SEQUENCE: 7
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257 <212> TYPE: DNA
258 <213> ORGANISM: Artificial Sequence
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261 <223> OTHER INFORMATION: Probe
263 <400> SEQUENCE: 8
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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 06/30/2005
PATENT APPLICATION:  US/10/539,630      TIME: 17:41:34

Input Set  : A:\pto.kd.txt
Output Set: N:\CRF4\06302005\J539630.raw
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Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:11,12,13,14

VERIFICATION SUMMARY　　　　　　　　　DATE: 06/30/2005
PATENT APPLICATION:　**US/10/539,630**　　　TIME: 17:41:34

Input Set : **A:\pto.kd.txt**
Output Set: **N:\CRF4\06302005\J539630.raw**

L:8 M:270 C: Current Application Number differs, Replaced Current Application No
L:8 M:271 C: Current Filing Date differs, Replaced Current Filing Date